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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/369,543	08/06/1999	STEPHEN TEMPLE	27754/35856	6919	
:	7590 09/24/2002				
JAMES P ZELLER MARSHALL O'TOOLE GERSTEIN MURRAY & BORUN 6300 SEARS TOWER 233 SOUTH WACKER DRIVE CHICAGO, IL 606066402			EXAMINER		
			NGUYEN, THINH H		
			ART UNIT	PAPER NUMBER	
			2861		
			DATE MAILED: 09/24/2002		

Please find below and/or attached an Office communication concerning this application or proceeding.

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ation No.		
0,543	TEMPLE, STEPHEN	
ner	Art Unit	
ł Nguyen	2861	
the cover sheet with the c	orrespondence ad	Idress
TO EXPIRE 3 MONTH(	S) FROM	
event, however, may a reply be tim	nely filed	
statutory minimum of thirty (30) days d will expire SIX (6) MONTHS from application to become ABANDONEI communication, even if timely filed	the mailing date of this c D (35 U.S.C. § 133).	
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(s) be held in abeyance. Se	ee 37 CFR 1.85(a).	
approved b)☐ disappro	ved by the Examin	er.
Office action.		
under 35 U.S.C. § 119(a)	)-(d) or (f).	
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under 35 U.S.C. § 119(e		l application).

	Application No.	Applicant(s)				
Office Action Summany	09/369,543	TEMPLE, STEPHEN				
` Office Action Summary	Examiner	Art Unit				
	Thinh H Nguyen	2861				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status						
1) Responsive to communication(s) filed on	· ·					
2a)⊠ This action is <b>FINAL</b> . 2b)□ Th	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims						
4)⊠ Claim(s) <u>1-40</u> is/are pending in the application						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-40</u> is/are rejected.						
7) Claim(s) is/are objected to.		į.				
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	•					
10) The drawing(s) filed on is/are: a) accep	ted or b)⊡ objected to by the Exan	niner.				
Applicant may not request that any objection to the	* '	` '				
11) The proposed drawing correction filed on		ved by the Examiner.				
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Exa	aminer.					
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents						
2. Certified copies of the priority documents	s have been received in Application	on No				
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal P	(PTO-413) Paper No(s) atent Application (PTO-152)				

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### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. Claims 1-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo. (JP 4-10948) in view of Kneezel. (U.S.5,598,191)

Kondo (as claimed in claim 1 and 3, see also figs. 2, 8) discloses the instant claimed color printhead and printing method wherein nozzles being arranged in blocks comprising 2 nozzles for each respective color and being arranged in the row in a repeat patterns. Therefore, it is clear that Kondo can print different swath of colors each being wider than a swath printed by a single nozzle side by side or overlap swaths of different colors at any point by controlling the relative shuttle movement of the print head and the ink-receiving medium (see also constitution).

As for said printhead being greater than the receiving medium, Kondo suggests the printhead width can be extended to shorten the time for printing since there will be less distance for the carrier to shuttle along the shaft. It would have been an obvious expedience to one of ordinary skill in the art at the time the invention was made to

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provide a wider printhead as suggested by Kondo thereby to enable a shorter printing time.

Even though Kondo does not exactly perform overlapped printing in registry with the previous printed swath (by one nozzle scanning at a time) in a further relative traverse printing further swaths, Kondo suggests moving the print head a distance slightly greater than one nozzle (L1<L) thereby to create overlapped printing almost in registry with a different color swaths. Applicant is to be noted that the selection that L1>L is optional as it is only suggested by Kondo. However, the shuttle movement distance does not limit to this range.

Kneezel (see the entire document for details) teaches the similar color nozzles arrangement including the step reciprocating the printhead (one nozzle distance) to print different color print swath and overlap swaths in registry therewith in further relative scanning of the printhead. In view of the Kneezel teachings, It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the controlling steps as taught by Kneezel in Kondo's printhead for printing overlapped print swaths in registry with the previous printed swaths.

#### Conclusion

2. This is a continuation of applicant's earlier Application No. 09/369,543. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** 

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even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### Contact Information

Any inquiry concerning this communication should be directed to Examiner Thinh Nguyen at telephone number (703) 308-7487.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 308-0956



Thinh Nguyen

September 20, 2002

Thinh Nguyen Primary Examiner Technology Center 2800